

# Class 1 Permit Modifications Implemented by LLNL, Livermore Site

Item #	Proposed Modification	Rationale for Proposed Modification
1	Modify Volume 1, Part IV, Section 5.2, page 15 to make the requirement consistent with the DTSC's regulations regarding RCRA Subpart BB.	This modification corrects a misstatement in the Operation Plan. The Operation Plan states, for the purposes of complying with the BB rule, first attempt for repairing equipment will be within five days of problem discovery. Title 22CCR section 66264.1058 (c) 2 requires that the first attempt be within 24 hours. The statement will be revised to reflect the requirements of the regulations.
2	Modify Volume 1, Part IV, Section 5.3.5, Page 18 to make a statement consistent with the DTSC's regulations.	This modification clarifies a statement in the Operation Plan. The Operation Plan states that all carbon removed from the control device is managed in accordance with the requirements. The statement will be clarified by saying all carbon removed from the control device that is hazardous waste is managed in accordance.... This change makes the language consistent with title 22CCR requirements.
3	Modify Volume 1, Part VI, Table VI-5 to correct title 22 CCR regulatory citations.	This modification corrects and updates regulatory citations in the Operation Plan.
4	Modify Volume 1, Part VI, Section 1.1.1.6, Page 6 to correct a typographical error.	This modification corrects the name of the water reactor unit which has mistakenly been called the waste reactor.
5	Modify Volume 1, Part VI, Section 1.2.1.5, Page 8 to correct a typographical error	Similar to item # 4, this modification corrects the unit name in the Operation Plan.
6	Modify Volume 1, Part VI, Section 4.2.7, Page 38 to correct misstatement regarding annual inspection of HEPA filters.	The Operation Plan mistakenly states that the HEPA filters will be inspected visually on an annual basis. By design, the HEPA filters filter out radioactive and hazardous constituents from hazardous waste management unit effluents. Opening and visually inspecting the filters could expose the inspectors to contamination. Also, as described in Vol. 1, Part VI, Section 4.2.7, the HEPA filters are subjected to a pressure drop test annually, which will be performed without exposing personnel. The annual pressure drop test will detect any defect or problems with the filters so there is no need for visual inspection.
7	Modify Volume 1, Part VI, Section 2.1, page 11 text to indicate that a designee of the Facility Manager can approve documentation of the ES&H evaluation review for HWM operations.	HWM has established protocol that allows designation of others to give approval of ES&H documentation evaluation in place of the Facility Manager.
8	Modify the text in Volume 11, Part XIV.4, Section 6.1.1 to clarify that each of the nine tanks associated with the DWTF tank farm has an inside diameter of 8 ft instead of 8.5 feet.	Section XIV.4-C in Volume 11 of the Part B Permit, contains the <i>Assessment Report for the DWTF Tank Farm, (certified on 6/19/96)</i> . The assessment was prepared and certified by Parsons Infrastructure and Technology Group Inc. Section 3.1.1 on page 10 of the assessment states that the inner diameter of the cylindrical portion of each of the nine tanks is 8'6". However, Table 3-1, Tank Specifications, on page 11 and Figure 3-1 of the assessment describes the tanks as having inner diameters of 8.0 feet, which is accurate. The proposed modification provides consistency within the engineering cert. and with the text in the Part B Permit. This change does not effect the working capacity or the overflow protection for the tanks. As stated in the engineering cert. the tanks' working capacity is 4000 gallons and remains 4000 gallons. Overflow protection is set at 4200 gallons.

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9	Modify the text in Volume 11, Part XIV.4, Section 6.1.1 to clarify that each of the nine tanks associated with the DWTF tank farm has a design pressure of 10 psig instead of 50 psig.	The tank farm tanks are not pressurized and, in fact, operate under slightly negative pressure. The pressure relief valves are set at 2 psi. The Independent Professional Engineering Assessment has certified the tank operations at 10 psi and the text is being changed to reflect this condition.
10	Modify text in Volume 11, Part XIV.4, Section 6.1.1 to correct inaccurate information.	The proposed modification is an informational change. The current text states that "Additional information regarding how the process control system is used to prevent collapse, rupture, or failure of the tank systems is provided in Appendix XIV.4-C". This is an inaccurate statement because programmable logic control (PLC) can not prevent tank collapse. The tank system includes other controls, such as pressure relief valves, to prevent failure. The proposed <u>modification corrects the inaccurate information.</u>
11	Modify text in Volume 11, Part XIV.4, Section 6.1.1.2 and Part B figures to indicate that the tank used for storage of polymer, a chemical reagent used in the treatment process, has been <u>enclosed to protect it from weather damage.</u>	The proposed modification is an informational change regarding the location configuration for storage of the chemical reagent container for polymer. The nature of polymer requires that it be protected from weather, so an enclosed area has been constructed to provide a weather barrier for that tank. The tank has not been moved or replaced.
12	Modify Figure XIV.4-2 to show the correct tank identification numbers.	This is an informational change to the drawing. The current Figure XIV.4-2 shows that two tanks have an ID # of THLT-108, two tanks have an ID # THLT-111, and two tanks have an ID # THLT-114. This proposed modification will rename three tanks so they will have distinct ID #s.
13	Modify text in Volume 11, Part XIV.4, Section 6.1.1.2 to clarify which materials will be used for <u>wetted parts of the various chemical pumps.</u>	This is a modification to include additional information to the text.
14	Modify text in Volume 11, Part XIV.4, Section 6.8.2, to clarify information.	This modification clarifies information for when feed valves close, based on liquid levels in each tank. The modification also removes the reference to freeboard levels because the tanks are closed top tanks and "freeboard level" is not an issue or a term associated with closed top tanks.
15	Modify figures in the Part B, Volumes 10 and 11 to show the installation of a wall and security door at the entrance to corridor 2 (between room 1028 <u>and corridor 2).</u>	This proposed modification reflects an upgrade to existing safety measures that minimizes access to the liquid waste processing area by people who are not qualified to operate equipment or who do not have a reason to be in the area.
16	Modify plumbing configuration of the tank farm.	This modification changes the configuration of the tank farm from a group of nine tanks that are all plumbed together to a tank farm that is plumbed in two separate groups; a group of six tanks and a group of three tanks. This modification will allow opportunities for minimization of mixed <u>waste generation.</u>

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17	Modify the waste transfer systems for the tank farm to provide for separate waste feed systems for the two separate tank groups.	This modification changes the waste transfer system for the tank farm in support of the configuration changes described in item 16. The transfer system will allow waste to be transferred from 5 quick-disconnect stations into any of the tanks in the six-tank group and will allow waste to be transferred to any of the tanks in the three-tank group through one separate quick-disconnect station. This modification supports LLNL's objective of <u>reducing mixed waste generation.</u>
18	Modify the waste transfer systems by providing for separate transfer pumps for each group of tanks.	This modification changes the tank farm's intra-transfer system of waste from a three pump system that allows transfer of waste between all nine tanks. The modified system uses two pumps to transfer waste between six tanks and one pump to transfer waste between the three remaining tanks in support of the configuration changes described in item 16. This modification <u>allows more opportunities for reducing mixed waste generation.</u>
19	Modify Volume 11, Part XIV.4, Figure XIV.4-6 to reflect the proposed modifications described in items 16 through 18.	This change is an informational change resulting from the proposed modifications described in items 16 through 18.
20	Modify Assessment Report for the DWTF Tank Farm by replacing the current Assessment dated 6/19/96 (Parson's Infrastructure and Technology Group Inc.) with a revised Independent Professional Engineering Assessment.	The preceding proposed modifications to the DWTF Tank Farm will be reflected in the revised Independent Professional Engineering Report.
21	Modify Volume 11, Part XIV.4 Section 2.1 to correct a typographical error regarding secondary containment capacity.	The statement contains a typographical error. The Operation Plan states capacity of the secondary containment incorrectly. The statement will be corrected to be consistent with the <u>DTSC regulations.</u>
22	Modify Volume 11, Part XIV.4, Section 3.3.1, Page 11 to correct a typographical error regarding stack exhaust monitoring.	The modification corrects a typographical error. The Operation Plan states that stack emissions are monitored for particles containing radionuclides. It should state that stack emissions are <u>monitored for particles containing radioactivity.</u>
23	Modify Volume 11, Part XIV.4, Section 3.3.1 to correct the statement regarding stack monitoring.	The statement in the Operation Plan misstates the process sampling for the stack gasses. This modification clarifies the information.
24	Modify Volume 11, Part XIV.4, Section 3.3.1 to change the stated analyte as a result of modification stated in #22 and 23.	The statement in the Operation Plan misstates the analysis process of the stack gasses. This modification clarifies the information.
25	Modify Volume 11, Part XIV.4, Section 3.3.4 to correct misstatement regarding stack monitoring equipment.	This modification corrects a misstatement in the Operation Plan. The Operation Plan mistakenly states that multiple VOC analyzers will be installed to detect breakthrough of volatiles from carbon columns. One VOC analyzer will be installed with multiple sampling points.

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Item #	Proposed Modification	Rationale for Proposed Modification
26	Modify Volume 11, Part XIV.4, Section 3.3.8 to correct misstatement regarding the operations of the Process Off Gas System (POGS).	The modification corrects a statement and provides more information regarding how the POGS works. The Operation Plan mistakenly states that the POGS blower will maintain a negative pressure on the down stream closed-vent system. Depending on the waste management unit, the POGS blower maintains negative pressure or adequate face velocity as necessary.
27	Modify figures in the Part B, Volumes 10 and 11 to show changes in a section of fence line located between Building 697 and the DWTF yard area.	The purpose of this modification is to identify changes to the fence line between Building 697 and the DWTF yard area on Figures included in the Part B Permit. Changes are being made to the perimeter fencing of the DWTF area so that egress from Building 697 does not involve entrance into the permitted/ nuclear facility.